

independent Claim 1 and claims dependent therefrom. The Examiner has pointed out that claims are unrelated if the subject matter has not been disclosed as capable of use together. However, the specification of the present application discloses that the process for spinning the partially oriented yarn and the process for draw-texturing the yarn are related, in that the yarn made in the spinning process is suitable for further use in the texturing process. In particular, on page 6, lines 8 through 11, the specification states that "only partially oriented poly(trimethylene terephthalate) yarns having an [elongation to break] of at least 110%, and which are made from polymer having an IV of at least 0.70 dl/g are stable and can be successfully draw-textured according to the process of the present invention". Moreover, a partially oriented poly(trimethylene terephthalate) yarn is required for the texturing process recited in Claim 3. Accordingly, Applicants respectfully submit that the two processes are related and the restriction is respectfully traversed.

The caption of Figure 3 has been amended, as requested by the Examiner, to indicate that the figure illustrates the prior art. A replacement page for the page on which Figures 3 and 4 originally appeared is attached.

The specification is being amended to include mention of reference items 63, S₄, and Y_s, as requested by the Examiner. This amendment introduces no new matter, since the reference items were originally mentioned in the specification. Specifically, in Example 4 on page 15, lines 2-3 recite: "The tension reported in Table V is as measured at tension monitoring device 63, shown in Figure 5". Also, S₄, surface speed of the friction discs, and Y_s, yarn speed, are referred to in Example 4, on page 15, lines 4-6. The specification is also being amended to indicate that Application No. 09/518,732 is now an issued U.S. patent.

Claims 5 and 6 are being amended to recite "an entry guide disc" rather than "at least one entry guide disc". This amendment is being made for clarification only and introduces no new matter. In making this amendment, Applicants do not disclaim any equivalents that include more than one entry guide disc, which Applicants submit were encompassed by the scope of the claims as originally filed.

Rejections under 35 U.S.C. § 112

Claims 5 and 6 were rejected under 35 U.S.C. § 112 as containing subject matter not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. This rejection is respectfully traversed.

Claim 5 recites a preferred embodiment of the invention, a process wherein the working spindle comprises an entry guide disc, three to five working discs, and one exit guide disc. Claim 6 recites a further preferred embodiment of the invention, a process wherein the working spindle comprises an entry guide disc, three to four working discs, and one exit guide disc. This preferred embodiment is illustrated in Figures 2a and 2b. At page 9, line 28 through page 10, line 2, the specification states: “In a preferred embodiment, the false-twist texturing process for poly(trimethylene terephthalate) yarn employs only three or four working discs, as shown in Figures 2a and 2b. Working discs 20, 21, 22, and 23 are mounted on parallel axles 24, 25, 26. Entry guide disc 27 and exit guide disc 28 serve to guide the yarn into the false-twisting apparatus and do not impose twisting force on the yarn”. (Emphasis added). Thus, the preferred embodiment illustrated in Figures 2a and 2b uses a total of 6 discs: one entry guide disc, one exit guide disc, and four working discs. This embodiment is within the scope of Claim 6, which recites “an entry guide disc, three to four working discs, and one exit guide disc”. (Emphasis added). The specification does state at page 9, lines 15-18, that the twisting force can be controlled in many ways, including that the “number of working discs can be altered and/or the surface properties of the working discs can be adjusted”. The specification further exemplifies the effect of the surface roughness and coefficient of friction of the disc material on the twist force applied to the yarn. Applicants respectfully suggest that the Examiner may be including the entry guide disc and exit guide disc in the number of working discs, which is not correct according to Applicants’ specification.

The conventional process to which the claimed processes are compared, and which is illustrated in Figure 3, employs 5 to 7 working discs that are more closely spaced than the working discs in a more preferred embodiment of the invention. That embodiment is distinguished from the preferred embodiments of the invention on page 10 of the specification by the spacing between the discs, not only by the number

of discs. In Claim 3, the twist angle, not the number of discs in the spindle, as an essential feature of the process. Moreover, the effect of twist angle is described in the specification, *inter alia*, on page 8, lines 3-13. While the twist angle and thus the level of twist insertion can be affected by properties of the spindle including the number of discs and/or the surface properties of the discs, there is no teaching in the specification that 3 or 4 working discs represent the upper limit on the discs on the spindle. The specification only teaches that preferred embodiments have 3 or 4 working discs.

Double Patenting Rejection

Claims 3-29 were rejected as being unpatentable over claims 1-19 of U.S. Patent No. 6,333,106. U.S. Patent No. 6,333,106 is owned by the assignee of the present Application. A Terminal Disclaimer is being filed herewith. Accordingly, Applicants request that the double patenting rejection be withdrawn.

CONCLUSION

In view of the above Amendments and Remarks, Applicants submit that Claims 3-29 meet the requirements of 35 U.S.C. §112, and are allowable. Accordingly, withdrawal of the rejections of Claims 3-29 and the objections to the specification and drawings and prompt allowance of all pending claims are respectfully requested.

If any additional fees are required in connection with the filing of this response, you are hereby authorized to charge deposit account number 04-1928 (E.I. du Pont de Nemours and Company).

Respectfully submitted,

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CLEAN UNMARKED VERSION

IN THE CLAIMS

Please cancel claims 1 and 2.

Please amend the claims as follows:

7. (Amended) The process of claim 4, wherein the friction spindle comprises an entry guide disc, three to five working discs, and one exit guide disc.
8. (Amended) The process of claim 4, wherein the friction spindle comprises an entry guide disc, three to four working discs, and one exit guide disc.

IN THE SPECIFICATION

On page 1 of the specification, on line 8, after "Application No. 09/518,732," and before "filed March 3, 2000", please insert the following:-- now U.S. Patent No. 6,287,688.--

On page 10, line 2, before the sentence that begins "In a preferred embodiment", insert the following sentence: -- The speed and direction of travel of the yarn is indicated by Y_s , and S_4 represents the direction and surface speed of the friction discs. --

On page 10, line 3, delete "2a" and insert therefore – 2b --.

On page 10, line 31, after "the yarn is fed" and before "into second roll 57", insert – past yarn tension sensor 63 and --.

FIG. 3
Prior art

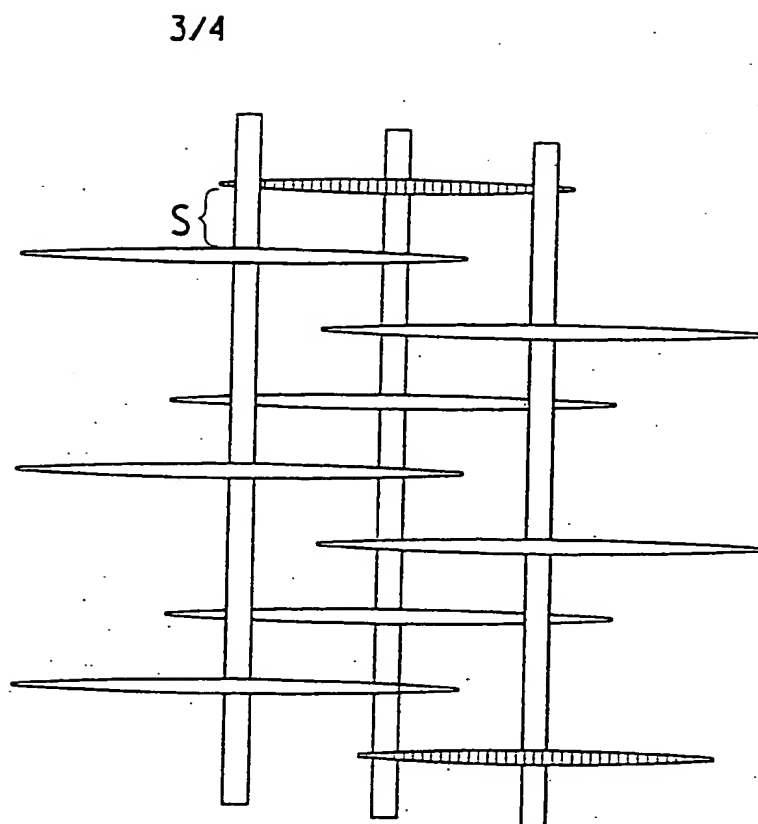


FIG. 4

